

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>PALGE04259</b>	<b>FOR FURTHER ACTION</b>	
	see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/KR 2004/002225</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>22 September 2003 (22.09.2003)</b>	International filing date ( <i>day/month/year</i> ) <b>2 September 2004 (02.09.2004)</b>
Applicant <div style="text-align: center; font-weight: bold; margin-top: 10px;">LG ELECTRONICS INC.</div>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see continuation of this first sheet.

2. ☐ Certain claims were found unsearchable (see continuation of this first sheet)

3. ☐ Unity of invention is lacking (see continuation of this first sheet)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in the continuation of this first sheet. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 2

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

**Continuation of first sheet****Continuation No. IV:****Text of the abstract****(Continuation of item 5 of the first sheet)**

The present invention discloses an apparatus for fixing an inner stator (320) of a motor of a reciprocal compressor and a method therefor. The apparatus for fixing the inner stator (320) of the motor of the reciprocal compressor includes a front frame, a cylinder inserted into and coupled to the front frame, an outer stator supported by the front frame (210) in a contact state, an inner stator (320) formed in a cylindrical shape and inserted onto the outside circumferential surface of the cylinder (410) with a predetermined interval from an inside diameter of the outer stator (310), a mover (330) inserted between the outer stator (310) and the inner stator (320), and coupled to a piston (420) inserted into the cylinder (410), and a stator fixing means incorporated with the front frame (210) to pass through the cylinder (410) or the inner stator (320) in the longitudinal direction, for supporting and fixing both sides (213,215) of the inner stator. Here, the apparatus is fabricated by using casting. Therefore, the apparatus firmly fixes the inner stator (320) to other components, and simplifies the components and the whole process.

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 2004/002225

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: F04B 35/04, H02K 1/12, H02K 15/02, F25B1/02, F16D 65/00.

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC<sup>7</sup>: F04B, H02KDocumentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
-Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPODOC, WPI, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0175135 A (HEO et al.) 18 September 2003 (18.09.2003) <i>abstract, figure 4.</i>	1, 5, 10
A	WO 2000/070223 A1 (BRASIL COMPRESSORES SA) 23 November 2000 (23.11.2000) <i>abstract, figure 2.</i>	1, 5, 6, 10, 11
X	GB 2 042 813 A (JOHNSON ELECTRIC MANUFACTORY L) 24 September 1980 (24.09.1980) <i>figure 2, claims 7 and 8.</i>	13, 14

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search  
9 November 2004 (09.11.2004)Date of mailing of the international search report  
26 November 2004 (26.11.2004)Name and mailing address of the ISA/ AT  
**Austrian Patent Office**  
Dresdner Straße 87, A-1200 ViennaAuthorized officer  
**KUTZENBERGER T.**

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 2004/002225

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,339,876 B1 (LEE) 22 January 2002 (22.01.2002) <i>abstract, figure 2.</i>	12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
PCT/KR 2004/002225

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
GB	A	2042813	1980-09-24	none			
US	A	20030175 135		none			
US	B	6339876	2002-01-22	KR	A	2000016887	2000-03-25
				US	B	6238192	2001-05-29
				CN	A	1240883	2000-01-12
				JP	A	2000038985	2000-02-08
WO	A	20000702 23		none			